Amendments to the Claims:

Claims 1-4, 6, 9, 10, 13, 15-27 have been amended herein. Please note that all claims currently pending and under consideration in the referenced application are shown below. Please enter these claims as amended. This listing of claims will replace all prior versions and listings of claims in the application. Please cancel claim 14, without prejudice to the possible filing of one or more divisional applications including same.

CLAIMS AS AMENDED

Please amend the claims as follows:

1. (Currently Amended) A method for receiving a signal, the method comprising:

sampling the received signal to produce a stream of received samples, the stream of received samples comprising a first set of received samples followed by a second set of received samples;

correlating said first set of received samples with a primary synchronization code to form a first slot timing estimate;

generating a second slot timing estimate based at least in part on said second set of received samples; and

decoding a secondary synchronization code word based on said first slot timing estimate, said second slot timing estimate and said second set of received samples; and[[.]]

testing a validity of the first slot timing estimate based on the second slot timing estimate to produce a slot timing validity.

2. (Currently Amended) The method of claim 1 wherein said decoding comprises testing the validity of said first slot timing estimate based on said generating.

3. (Currently Amended) The method of claim 2 [[1]]wherein said testing validity of said first slot timing estimate comprises comparing said first slot timing estimate with said second slot timing estimate.

4.   (Currently Amended)   The method of claim 2 [[1]]further comprising determining a validity of said secondary synchronization code word based on said testing validity of said first slot timing estimate.

5.   (Original)   The method of claim 1 further comprising accumulating said first set of received samples over an integer number of slot periods.

6.   (Currently Amended)   The method of claim 5 [[1]] wherein said integer number of slot periods is equal to an integer multiple of a number of slot periods in a frame period.

7.   (Original)   The method of claim 5 wherein said integer multiple is greater than one.

8.   (Original)   The method of claim 1 wherein said accumulating is performed over a period longer than one frame.

9.   (Currently Amended)   A method for receiving a signal, the method comprising:

sampling the received signal to produce a stream of received samples, the stream of received samples comprising a first set of received samples followed by a second set of received samples;

correlating said first set of received samples with a primary synchronization code to form a first slot timing estimate, The method of claim 1wherein said correlating comprises:

measuring a correlation of a primary synchronization code sequence with said first set of received samples at each of a predetermined number of bin offsets to form a correlation energy corresponding to each of said predetermined number of bin offsets; and

selecting said first slot timing estimate based on a bin offset having the greatest corresponding correlation energy;[[.]]

generating a second slot timing estimate based at least in part on said second set of received samples; and

decoding a secondary synchronization code word based on said first slot timing estimate, said second slot timing estimate and said second set of received samples.

10. (Currently Amended) The method of claim 9 [[8]]wherein said measuring is performed using digital matched filtering.

11. (Original) The method of claim 1 wherein said decoding comprises measuring a correlation between each of a predetermined set of secondary synchronization code words and a predetermined portion of said second set of received samples.

12. (Original) The method of claim 1 wherein said measuring utilizes a soft decision block decoding technique.

13. (Currently Amended) The method of claim 12 [[11]]wherein said soft decision block decoding technique utilizes the Chase algorithm.

14. (Cancelled).

15. (Currently Amended) The apparatus of claim 25 [[14]] wherein said primary synchronization code detector comprises a slot buffer for accumulating received samples into a predetermined number of sample bins.

16. (Currently Amended) The apparatus of claim 15 [[14]]wherein said predetermined number is equal to a number of samples in a single slot.

17. (Currently Amended) The apparatus of claim 15 [[1]]wherein said predetermined number is equal to an integer multiple of a number of samples in a slot.

18. (Currently Amended) An apparatus for receiving a signal comprising:
sampler for sampling a received signal to produce a stream of received samples, the stream of received samples comprising a first set of received samples followed by a second set of received samples;

primary synchronization code detector for accumulating the stream of received samples, forming a first slot timing estimate based on the first set of received samples, forming a second slot timing estimate based at least in part on the second set of received samples, and testing a validity of the first slot timing estimate based on said first and second slot timing estimates, wherein said primary synchronization code detector comprises a slot buffer for accumulating received samples into a predetermined number of sample bins, The apparatus of claim 1 wherein each sample accumulated in the slot buffer is added to a value stored in a sample bin having a sample bin offset corresponding to the sample, and wherein the value stored in the sample bin having the sample bin offset is replaced with the resultant sum[[.]]; and

secondary synchronization code detector for decoding a first secondary synchronization code word based on a selected portion of the second set of received samples and said validity of the first slot timing estimate, wherein the selected portion is selected based on the first slot timing estimate, and wherein the decoding produces a frame timing estimate.

19.   (Currently Amended) An apparatus for receiving a signal comprising:

sampler for sampling a received signal to produce a stream of received samples, the stream of received samples comprising a first set of received samples followed by a second set of received samples;

primary synchronization code detector for accumulating the stream of received samples, forming a first slot timing estimate based on the first set of received samples, forming a second slot timing estimate based at least in part on the second set of received samples, and testing a validity of the first slot timing estimate based on said first and second slot timing estimates, wherein said primary synchronization code detector comprises a slot buffer for accumulating received samples into a predetermined number of sample bins, The apparatus of claim 1 wherein said primary synchronization code detector further comprises a matched filter for measuring a primary synchronization code correlation energy for each of said predetermined number of sample bins[[.]]; and

secondary synchronization code detector for decoding a first secondary synchronization code word based on a selected portion of the second set of received samples

and said validity of the first slot timing estimate, wherein the selected portion is selected based on the first slot timing estimate, and wherein the decoding produces a frame timing estimate.

20.   (Currently Amended) An apparatus for receiving a signal comprising:

sampler for sampling a received signal to produce a stream of received samples, the stream of received samples comprising a first set of received samples followed by a second set of received samples;

primary synchronization code detector for accumulating the stream of received samples, forming a first slot timing estimate based on the first set of received samples, forming a second slot timing estimate based at least in part on the second set of received samples, and testing a validity of the first slot timing estimate based on said first and second slot timing estimates, wherein said primary synchronization code detector comprises a slot buffer for accumulating received samples into a predetermined number of sample bins, wherein said primary synchronization code detector further comprises a matched filter for measuring a primary synchronization code correlation energy for each of said predetermined number of sample bins, ~~The apparatus of claim 18~~wherein said matched filter performs said measuring using real and imaginary correlation energy values for each of said predetermined number of sample bins[[.]]; and

secondary synchronization code detector for decoding a first secondary synchronization code word based on a selected portion of the second set of received samples and said validity of the first slot timing estimate, wherein the selected portion is selected based on the first slot timing estimate, and wherein the decoding produces a frame timing estimate.

21.   (Currently Amended) The apparatus of claim 25 [[1]]wherein said secondary synchronization code detector comprises a secondary synchronization code sample buffer for accumulating[[,]] the selected portion.

22.   (Currently Amended) <u>An apparatus for receiving a signal comprising:</u>

<u>sampler for sampling a received signal to produce a stream of received samples, the stream of received samples comprising a first set of received samples followed by a second set of received samples;</u>

<u>primary synchronization code detector for accumulating the stream of received samples, forming a first slot timing estimate based on the first set of received samples, forming a second slot timing estimate based at least in part on the second set of received samples, and testing a validity of the first slot timing estimate based on said first and second slot timing estimates, wherein said primary synchronization code detector comprises a slot buffer for accumulating received samples into a predetermined number of sample bins, wherein said primary synchronization code detector further comprises a matched filter for measuring a primary synchronization code correlation energy for each of said predetermined number of sample bins, wherein said matched filter performs said measuring using real and imaginary correlation energy values for each of said predetermined number of sample bins; and</u>

<u>secondary synchronization code detector for decoding a first secondary synchronization code word based on a selected portion of the second set of received samples and said validity of the first slot timing estimate, wherein the selected portion is selected based on the first slot timing estimate, and wherein the decoding produces a frame timing estimate, and</u> ~~The apparatus of claim 20,~~ wherein said secondary synchronization code detector further comprises a secondary synchronization channel correlator for choosing the first secondary synchronization code word from a predetermined set of secondary synchronization code words.

23.   (Currently Amended) <u>An apparatus for receiving a signal comprising:</u>

<u>sampler for sampling a received signal to produce a stream of received samples, the stream of received samples comprising a first set of received samples followed by a second set of received samples;</u>

<u>primary synchronization code detector for accumulating the stream of received samples, forming a first slot timing estimate based on the first set of received samples, forming a second slot timing estimate based at least in part on the second set of received</u>

samples, and testing a validity of the first slot timing estimate based on said first and second slot timing estimates; and

secondary synchronization code detector for decoding a first secondary synchronization code word based on a selected portion of the second set of received samples and said validity of the first slot timing estimate, wherein the selected portion is selected based on the first slot timing estimate, and wherein the decoding produces a frame timing estimate, and wherein said secondary synchronization code detector comprises a secondary synchronization code sample buffer for accumulating the selected portion, and ~~The apparatus of claim 21,~~ wherein said secondary synchronization channel correlator measures a correlation energy for each of said predetermined set of secondary synchronization code words, and wherein said first secondary synchronization code word has the greatest measured correlation energy.

24.   (Currently Amended)   The apparatus of claim 25 [[1]]further comprising a pilot detector for estimating a pilot channel offset based on the frame timing estimate.

25.   (Currently Amended) An apparatus for receiving a signal comprising:

sampler for sampling a received signal to produce a stream of received samples, the stream of received samples comprising a first set of received samples followed by a second set of received samples;

primary synchronization code detector for accumulating the stream of received samples, forming a first slot timing estimate based on the first set of received samples, forming a second slot timing estimate based at least in part on the second set of received samples, and testing a validity of the first slot timing estimate based on said first and second slot timing estimates;

secondary synchronization code detector for decoding a first secondary synchronization code word based on a selected portion of the second set of received samples and said validity of the first slot timing estimate, wherein the selected portion is selected based on the first slot timing estimate, and wherein the decoding produces a frame timing estimate; and

~~The apparatus of claim 1 further comprising~~

a control processor for testing the validity of the first slot timing estimate based on the second slot timing estimate[[,]] to produce a slot timing validity.

26.   (Currently Amended) The apparatus of claim <u>25</u> [[24]]further comprising a pilot detector for estimating a pilot channel offset based on the frame timing estimate and on the slot timing validity.

27.   (Currently Amended) An apparatus for receiving a signal comprising:

means for sampling the received signal to produce a stream of received samples, the stream of received samples comprising a first set of received samples followed by a second set of received samples;

means for correlating said first set of received samples with a primary synchronization code to form a first slot timing estimate;

means for generating a second slot timing estimate based on said first set of received samples and said second set of received samples; and

means for decoding a secondary synchronization code word based on said first slot timing estimate, said second slot timing estimate and said second set of received samples; and[[.]]

<u>means for testing the validity of the first slot timing estimate based on the second slot timing estimate to produce a slot timing validity.</u>